

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2845

Name: B-0033 / WALKER RD. OVER LITTLE FAUS.

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended _____	Eligibility Not Recommended <u>X</u>
Criteria: <u>  </u> A <u>  </u> B <u>  </u> C <u>  </u> D Considerations: <u>  </u> A <u>  </u> B <u>  </u> C <u>  </u> D <u>  </u> E <u>  </u> F <u>  </u> G <u>  </u> None	
Comments: _____ _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

MARYLAND INVENTORY OF HISTORIC BRIDGES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION/  
MARYLAND HISTORICAL TRUST

MHT No. BA-2845

SHA Bridge No. B0033 Bridge name Walker Road over Little Falls

**LOCATION:**

Street/Road name and number [facility carried] Walker Road

City/town Walker Vicinity X

County Baltimore

This bridge projects over: Road      Railway      Water X Land     

Ownership: State      County X Municipal      Other     

**HISTORIC STATUS:**

Is the bridge located within a designated historic district? Yes      No X

National Register-listed district      National Register-determined-eligible district     

Locally-designated district      Other     

Name of district     

**BRIDGE TYPE:**

Timber Bridge     :

Beam Bridge      Truss -Covered      Trestle      Timber-And-Concrete     

Stone Arch Bridge     

Metal Truss Bridge     

Movable Bridge     :

Swing     

Vertical Lift     

Bascule Single Leaf     

Retractable     

Bascule Multiple Leaf     

Pontoon     

Metal Girder     :

Rolled Girder     

Plate Girder     

Rolled Girder Concrete Encased     

Plate Girder Concrete Encased     

Metal Suspension     

Metal Arch     

Metal Cantilever     

Concrete X:

Concrete Arch      Concrete Slab X Concrete Beam      Rigid Frame     

Other      Type Name

**DESCRIPTION:**Setting: Urban \_\_\_\_\_ Small town \_\_\_\_\_ Rural X**Describe Setting:**

Bridge No. B0033 carries Walker Road over Little Falls in Baltimore County. At the bridge location, Walker Road runs north-south and Little Falls flows west to east. The bridge is located at a crossroads known as Walker, 61 meters (200 feet) south of Stabler Church Road, 30 meters (100 feet) north of the Gunpowder Falls State Park (NCRR Trail), and is surrounded by woodland and open space.

**Describe Superstructure and Substructure:**

Bridge No. B0033 is a 1-span, single-lane, concrete slab bridge. The bridge, built in 1915, has not been reconstructed or had any major rehabilitation. The total structure length is 13.1 meters (43 feet), with a span length of 12.2 meters (40 feet) and has a clear roadway width of 5.3 meters (17.3 feet). The out-to-out width is 6.5 meters (21.3 feet); there are no sidewalks. The concrete slab is .45 meters (1.5 feet) thick, and it has a 7.62 centimeters (3 inch) thick bituminous wearing surface. The structure has solid panel concrete parapets, which are integral with the concrete slab, and the roadway approaches have metal guard rails on both sides of the bridge. The north approach roadway width is 5.5 meters (18 feet), while the south roadway approach is 4.3 meters (14 feet) wide. The south approach roadway has a moderate horizontal curve. The substructure consists of two concrete abutments. There are four U-shaped concrete wing walls. The bridge is posted for 13.6, 17.2 and 30.8 tonnes (15, 19 and 34 tons) for H15, MD Type 3 and MD Type 3S2 vehicles, respectively. The structure has a sufficiency rating of 81.7.

According to the 1997 bridge inspection report, this structure was in satisfactory condition with spalling and cracking. The approach roadways have minor settlement at the roadway-bridge transitions. Both approach roadway surfaces have moderate potholes, while the south approach pavement has a patch across the entire roadway at the bridge transition. The concrete deck has honeycombing, minor cracking and spalling of the soffits. The integral parapets exhibit minor spalling with no structural defects. The concrete abutments have minor scaling and spalling, while the wing walls are in good condition with minor map cracking and scaling.

**Discuss Major Alterations:**

According to the 1997 bridge inspection report, the structure has not been altered.

**HISTORY:**WHEN was the bridge built: 1915This date is: Actual X Estimated \_\_\_\_\_Source of date: Plaque \_\_\_\_\_ Design plans \_\_\_\_\_ County bridge files/inspection form X

Other (specify): \_\_\_\_\_

**WHY was the bridge built?**

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

**WHO was the designer?**

Unknown

**WHO was the builder?**

Unknown

**WHY was the bridge altered?**

N/A

**Was this bridge built as part of an organized bridge-building campaign?**

Unknown

**SURVEYOR/HISTORIAN ANALYSIS:**

**This bridge may have National Register significance for its association with:**

A - Events \_\_\_\_\_ B- Person \_\_\_\_\_  
C- Engineering/architectural character     X    

The bridge is eligible for the National Register of Historic Places under Criterion C, as a significant example of concrete slab construction. The structure has a high degree of integrity and retains such character-defining elements of the type as the slab, parapets, abutments and wing walls.

**Was the bridge constructed in response to significant events in Maryland or local history?**

Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-1904 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's roads and bridge improvement programs mirrored economic cycles. The first road improvement of the State Roads Commission was a 7 year program, starting with the Commissions establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920-1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of \$3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund (with an equal sum from the counties) the building of lateral roads. the number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had been inadequate to the huge freight trucks and volume of



Lay, Maxwell Gordon

1992 *Ways of the World: A History of the World's Roads and of the Vehicles That Used Them.* Rutgers University Press, New Brunswick, New Jersey.

Maryland State Roads Commission

1930a *Report of the State Roads Commission for the Years 1927, 1928, 1929 and 1930.* State of Maryland, State Roads Commission, Baltimore.

1930b *Standard Plans.* State of Maryland, State Roads Commission, Baltimore.

Taylor, Frederick W., Sanford E. Thompson, and Edward Smulski

1939 *Reinforced-Concrete Bridges with Formulas Applicable to Structural Steel and Concrete.* John Wiley & Sons, Inc., New York.

Tyrrell, H. Grattan

1909 *Concrete Bridges and Culverts for Both Railroads and Highways.* The Myron C. Clark Publishing Company, Chicago and New York.

**SURVEYOR:**

Date bridge recorded July 1998

Name of surveyor Caroline Hall/Tim Tamburrino

Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204

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Maryland Historic Highway Bridges

Bridge Type CONCRETE SLAB

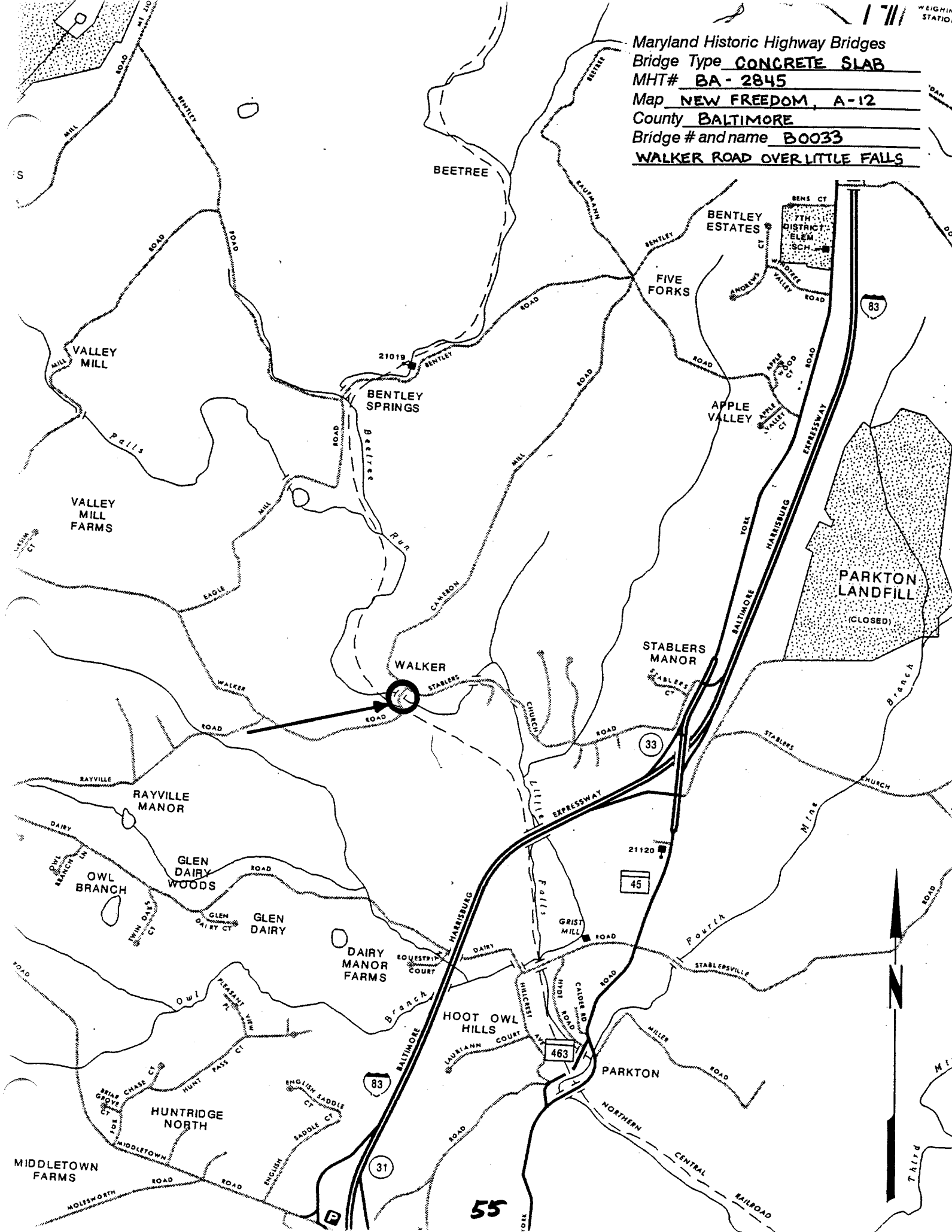
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Map NEW FREEDOM, A-12

County BALTIMORE

Bridge # and name B0033

WALKER ROAD OVER LITTLE FALLS







1. BA-2845
2. Walker Road over Little Falls
3. Baltimore Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Elevation looking upstream
8. 10F4



1. BA-2845
2. Walker Road over Little Falls
3. Baltimore Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Elevation looking downstream
8. 2 of 4



1. BA-2845
2. Walker Road over Little Falls
3. Baltimore Co., MD
4. Wallace, Montgomery & Assoc,
5. 12/97
6. MD SHPO
7. Looking Northeast
8. 3 of 4



1. BA-2845
2. Walker Road over Little Falls
3. Baltimore Co., MD
4. Wallace, Montgomery & Assoc.
5. 12/97
6. MD SHPO
7. Looking Southwest
8. 4 of 4